STEVENS VILLAGE
Health Clinic

Alaska Rural Primary Care Facility
Code and Condition Survey Report

July 23, 2001

I. EXECUTIVE SUMMARY

Overview

The Stevens Village Clinic is located in the front portion of a one-story structure that was originally designed to be a cold storage building. The building is reported to be about 9 years old. The clinic is too small to accommodate its current needs and is poorly arranged. The waiting area is completely separated from the reception area, and is accessed through the janitor station. A total lack of storage area in the facility creates a cluttered and inefficient use of space throughout the reception/office area. Overall, the building is in reasonably good condition.

Renovation and Addition

The existing clinic is 680 s.f. and would require an addition of 820 s.f. to meet the 1500 s.f. minimum area recommended for a small clinic by the Alaska Rural Primary Care Facility study. The floor plan layout would require the remodel of approximately 100% of the interior space. The cost of required renovations and code upgrades, combined with the cost of a new addition equals 133% of the cost of a new clinic.

New Clinic

Because the cost of renovation and addition is more than 75% of the cost of new construction, a new clinic of at least 1500 s.f. should be built to replace the existing clinic. The community prefers the current clinic location and has proposed to build the new clinic, if approved, on a nearby site. The current site is conveniently located near utilities, the school, and other community services.

II. GENERAL INFORMATION

A. The Purpose of the Report

ANTHC has entered into a cooperative agreement with the Denali Commission to provide management of the small clinic program under the Alaska Rural Primary Care Facility (ARPCF) assessment, planning, design, and construction. The purpose of the Code and Condition Survey Report is to validate the data provided by the community in the Alaska Rural Primary Care Facility Needs Assessment and to provide each community with a uniform standard of evaluation for comparison with other communities to determine the relative need among the communities of Alaska for funding assistance for the construction of new or remodeled clinic facilities. The information gathered will be tabulated and analyzed according to a set of fixed criteria that will yield a priority list for funding. Additionally, the relative costs of new construction vs. remodel/addition will be evaluated to determine the most practical and cost effective means to bring the clinics up to a uniform standard of program and construction quality. The information provided in this report is one component of the scoring for the small clinic RFP that the Denali Commission sent to communities in priority Groups 1 and 2.

B. The Assessment Team

The survey was conducted on May 21, 2001. John Biggs, AIA, Architects Alaska and Ralph DeStefano, PE, RSA Engineering, completed the field inspection for this project. Chet Crafts of ANTHC and Charles Woodley, Tanana Chiefs Conference, were the team escorts. Chet reviewed alternative site locations with village leaders. Mr. Crafts and Mr. Woodley made introductions and conducted the village briefings. Team members who assisted in the preparation of the report included Stephen Schwicht and Ian VanBlankenstein of NANA/DOWL, project managers for the survey team, and Jay Lavoie of Estimations, Inc.

C. The Site Investigation

The format adopted is similar to the "Deep Look", a facility investigation and condition report used by both ANTHC and the Public Health Service, in maintaining an ongoing database of facilities throughout the country. Facilities are evaluated with respect to the requirements of the governing building codes and design guidelines. Building code compliance, general facility condition, and program needs have been evaluated. This written report includes a floor plan of the clinic and a site plan indicating the existing clinic site. Additional information gathered during the site investigation that is referred to in the report, which includes sketches of building construction details, a building condition checklist, and proposed plans for village utility upgrades, are not included with this report. This information is available for viewing at ANTHC's Anchorage offices and will be held for reference.

III. CLINIC INSPECTION SUMMARY

A. Community Information

The community of Stevens Village has a current population of 87 as published in the 2000 U.S. Census. It is located 90 miles northwest of Fairbanks in the Rampart Recording District. It is a part of the Doyon Regional Corporation. Refer to the attached Alaska Community Database prepared by the Alaska Department of Community and Economic Development in Appendix C for additional community information.

B. General Clinic Information

The structure housing the Stevens Village clinic was constructed in 1992 and has generally performed well. The building is 40' x 72', on steel piles, with T-111 siding and a metal roof. The clinic is located in the front section of the building. Because of the location of the clinic, it also functions as a corridor to the other areas of the building, which decreases its ability to function as a safe, clean environment. In addition, the building has no ramped entry and is not accessible, and the lack of accessibility is apparent in all areas of the clinic.

C. Program Deficiency Narrative

The main programmatic deficiencies pertain to lack of adequate storage, lack of a trauma room, and lack of handicapped access throughout. In addition, the clinic is arranged poorly, with no separation between public and private spaces, no supervision of the waiting room, and no confidentiality. There are no bathing facilities, no work spaces for traveling health aids, no sleeping areas, and inadequate cabinets and shelving. There is no arctic entry. Visitors to the clinic enter directly into the main office, which is adjacent to the exam room. The waiting room is entered through a janitorial space located behind the front entry door. In addition, the main admin/clinic area serves as a circulation space for traffic to the community spaces in the rear of the building, as well as general storage area. The community believes it would be best served by a new building which can meet all of the immediate and long term problems.

The following table illustrates a comparison between the current actual square footage (SF) and the 1500 s.f. minimum area recommended by the Alaska Rural Primary Care Facility study for a Small Clinic:

Table 1 – ARPCF Clinic Area Comparison

Purpose/Activity	#	Existing Net SF	#	ARPCF Small	Difference
Arctic Entry		-	1	50	50
Wait/Recep/Closet	1	158	1	100	-58
Trauma/Telemed/Exam	1	110	1	200	90
Office/Exam	1	332.5	1	150	-182.5
Admin./Records		-		-	-
Pharmacy/Lab		-	1	80	80
Portable X-ray		-		-	-
Spec. Clinic/Health Ed./Conf.		-	1	150	150
Patient Holding/Sleep Room		-	1	80	80
Storage		-	1	80	80
HC toilet	1	25	1	60	35
Janitorial Closet	1	20	1	30	10
Total Net Area				980	
Mechanical Room		-	1	114	114
Morgue		-	1	30	30

The Stevens Village Clinic has a current gross area of 680 s.f. This would require a gross building area expansion of approximately 820 s.f. to meet the 1500 s.f. minimum ARPCF requirement for a Small clinic.

An analysis of the existing building's program functions follows. Please also refer to the floor plan in Section H:

- **Arctic Entries**: No arctic entry exists for this building. As a result, dirt is tracked into the clinic. The exterior clinic door is extremely worn and not weathertight.

- **Waiting:** The waiting area was created from a converted storage area. The waiting area is totally separated and not supervised by the receptionist. The entry to the waiting area is through the janitorial station and is not accessible.

- **Trauma/Telemed/Exam:** The clinic has no trauma room.

- **Office/Exam:** The exam area is located directly adjacent to the reception area and has very little acoustic separation for confidentiality. The exam room is extremely small and has very limited storage and furniture.

- **Administration/Records:** The administration area is collocated the same as the reception area in the clinic. Located adjacent to the main entry, the administration/records area lacks confidentiality, privacy, and security.

- **Pharmacy/Lab:** None provided.

- **Specialty Clinics:** Any specialty clinics occur as part of the daily clinic functions and take place in the main entry room and exam room.

- **Patient Holding/Sleep:** None provided.

- **Storage:** None provided.

- **HC Toilet Room:** The toilet room lacks sufficient clear space for handicapped accessibility, in addition to non-accessible fixtures.

- **Janitor Closet:** The janitor closet impedes access to the existing waiting area.

- **Ancillary Spaces:** There are no ancillary spaces in this clinic.

D. Architectural/Structural Condition

The building which houses the clinic is approximately 40’ x 72’, single story, wood frame with wood truss roof, on steel pilings. The finish floor is located approximately 6’ above grade. The foundation and building structure appear to be in satisfactory condition. Originally constructed as a cold-storage building, the middle third of the building includes 2-1/2” raised concrete floor over the plywood subfloor. At the roof, however, light was visible through the joints in the plywood, indicating that there is no roof underlayment under the metal roofing and that there may be some roof leaks.

E. Site Considerations

The existing building site is conveniently located near utilities and to the rest of the community. If a replacement clinic is constructed, the adjacent site shown on the map is preferred by the community due to its proximity to utilities. It is also located less than a block from the existing school building. Site utilities include village water, sewer, power, and telephone service directly to the building.

F. Mechanical Condition

Heating and Fuel Oil: Heat for the clinic is provided by three Burnham boilers located in the adjacent washeteria. Hydronic heating fluid is piped to the clinic, where baseboard and unit heaters are utilized to distribute the heat. The heating system is also connected to a waste heat system from the village generator plant located near the clinic. At the time of our visit the waste heat system was not functioning. Fuel oil is provided to the boilers from a tank mounted on a steel stand. No fuel leaks were noted on the washeteria fuel system, however there was a strong diesel smell around the village bulk storage system possibly indicating a present or past leak. Although outside the scope of our survey, it was noted that the village bulk fuel storage system is in poor condition and needs to be replaced.

Ventilation: There is no mechanical ventilation or exhaust for the clinic. The only source of ventilation for the occupied spaces is though operable windows. The use of operable windows only for ventilation is not acceptable. The clinic needs to be provided with a mechanical ventilation system.

Plumbing: Water and sewer utilities are provided by the adjacent washeteria. Hot water is generated in the washeteria through a boiler water heat exchanger and hot water storage tank. At the time of our visit, the clinic lacked hot water and had low water pressure due to problems with the piping between the clinic and washeteria. According to clinic personnel, the water lines freeze each winter and need to be thawed and repaired. Plumbing fixtures in the clinic include a toilet and lavatory in the restroom, neither meeting ADA requirements. The exam room does not have a sink and there is no mop sink. Water for housekeeping is provided through a wall mounted faucet and floor drain in the hallway.

G. Electrical Condition

Power: 120/240-volt single-phase power is provided to the clinic through an overhead service. There is no meter for the facility; power is feed directly from the adjacent village power plant. Power for the clinic is feed from a circuit breaker panel located in the community office next to the clinic. The breaker panel as well as the reset of the electrical power system are in poor condition. The office area is receiving power through an extension cord from an adjacent space. There are an inadequate number of receptacles throughout the building. Receptacles within 10 feet of the restroom sink are not GFI protected. There are no receptacles on the exterior of the building. These deficiencies and others are described in detail in the Deficiency Evaluation and Cost Assessment forms.

Lighting and Emergency Fixtures: Fluorescent fixtures provide the interior lighting. Lighting levels are poor throughout the facility; the lighting is not adequate for a clinic and needs to be replaced. No emergency light fixtures or exit signs are provided in the clinic. Exterior lighting is provided with incandescent fixtures at the clinic entrance. The fire alarm system consists of a single battery-operated smoke detectors installed in the hallway.

Telecommunications: The telecommunication system includes two phone lines serving the clinic. The clinic does not have a Telemed system.

H. Existing Facility Floor Plan

See following sheet for the floor plan of the existing clinic.

J. Community Plan

Refer to the attached community plan for location of the existing clinic and the proposed location for the new clinic. If the existing clinic site is the preferred location or if a new site has not yet been selected, only the existing clinic location will be shown.

IV. DEFICIENCY EVALUATION AND COST ASSESSMENT

The attached deficiency reporting forms are based on Public Health Service form AK H SA-43. The forms are numbered sequentially for each discipline starting with **A01** for Architectural and structural deficiencies, **M01** for Mechanical deficiencies and **E01** for Electrical deficiencies.

A. Deficiency Codes

Deficiencies are further categorized according to the following PHS Deficiency codes to allow the work to be prioritized for federal funding, should that apply. Deficiency codes used in this survey include:

02 **Fire and Life Safety:** These deficiencies identify areas where the facility is not constructed or maintained in compliance with provisions of the state mandated building codes including the International Building Code, The Uniform Fire Code, NFPA 101, The Uniform Mechanical and Plumbing Codes and The National Electrical Code.

03 **Safety:** These deficiencies identify miscellaneous safety issues.

04 **Environmental Quality:** This addresses DEC regulations, hazardous materials and general sanitation.

05 **Program Deficiencies:** These are deficiencies which show up as variations from space guidelines established in the Alaska Primary Care Facility Facility Needs Assessment Project and as further evaluated through observation at the facility site and documented in the facility floor plans.

07 **Disability Access Deficiencies:** The items with this category listing are not in compliance with the Americans with Disabilities Act.

08 **Energy Management:** These deficiencies address the efficiency of heating systems/fuel types and the thermal enclosures of buildings.

11 **Structural Deficiencies:** These are deficiencies with the fabric of the building. It may include the foundations, the roof or wall structure, the materials used, the insulation and vapor retarders, the attic or crawl space ventilation and the general condition of interior finishes. Foundation systems are included in this category.

12 **Mechanical Deficiencies:** These are deficiencies in the plumbing, heating, ventilating, air conditioning, or medical air systems.

13 **Electrical Deficiencies:** These are deficiencies with electrical generating and distribution systems, fire alarm systems and communications systems.

14 **Utilities:** This category is used for site utilities, as opposed to those within the building and may include sewer lines and water and power distribution.

B. Photographs

Each sheet has space for a photograph. Some deficiencies do not have photos. Photographs do not cover all areas where the deficiencies occur but are intended to provide a visual reference to persons viewing the report who are not familiar with the facility. Additional photographs of the clinic and the surrounding area are included in Appendix B.

C. Cost Estimate General Provisions

New Clinic Construction

- **Base Cost**

The Base Cost provided in Section VI of this report is the direct cost of construction, inclusive of general requirements (described below) and contingency for design unknowns (an estimating contingency) The base cost is exclusive of overhead and profit, mark-ups, area cost factors and contingencies. Material costs for the project are all calculated FOB Anchorage and labor rates are based on Davis Bacon wages, regionally adjusted to Anchorage. Transportation costs, freight, Per Diem and similar costs are included in the base costs. The Project Factors and Area Cost Factor are multipliers of the base costs.

General Requirements are based on Anchorage costs without area adjustment. It is included in the Base Cost for New Clinics. These costs are indirect construction cost not specifically identifiable to individual line items. It consists of supervision, materials control, submittals and coordination, etc. The general requirements factor has not been adjusted for Indian Preference.

The Design Unknowns Contingency is an estimator's contingency based on the schematic nature of the information provided, the lack of any real design, and the assumption that any project will encompass related work not specifically mentioned.

- **Project Cost Factors**

  Equipment Costs for new medical equipment has been added at 17% of the cost of new floor space.

  Design Services is included at 10% to cover professional services including engineering and design.

  Construction Contingency is included at 10% of the Base Costs to cover changes encountered during construction.

  Construction Administration has been included at 8% of the Base Costs. This is for monitoring and administration of the construction contract.

- **Area Cost Factor**

The Area Cost Factor used in the cost estimates for this facility is shown in Section VI of this report. The area cost factors are taken from a recent study completed for the Denali Commission for statewide healthcare facilities. The numbers are the result of a matrix of cost variables including such items as air travel, local hire costs, room and board, freight, fire protection equipment, foundation requirements, and heating equipment as well as contractor costs such as mobilization, demobilization, overhead, profit, bonds and insurance. These parameters were reconsidered for each village, following the site visit, and were modified, if necessary.

- **Estimated Total Project Cost of New Building**

This is the total estimated cost of the project, including design services. The construction contract will be work subject to Davis Bacon wages, and assumes construction before year-end 2001. No inflation factor has been applied to this data.

Remodel, Renovations, and Additions

- **Base Cost**

The Base Cost provided in the specific deficiency sheets is the direct cost of construction, exclusive of overhead and profit, mark-ups, area cost factors and contingencies. Material costs for the project are all calculated FOB Anchorage and labor rates are based on Davis Bacon wages, regionally adjusted to Anchorage. Most of the deficiency items do not constitute projects of sufficient size to obtain efficiency of scale. The estimate assumes that the projects are completed either individually, or combined with other similar projects of like scope. The numbers include moderate allowances for difficulties encountered in working in occupied spaces and are based on remodeling rather than on new construction costs. Transportation costs, freight, Per Diem and similar costs are included in the base costs. The General Requirements, Design Contingency and Area Cost Factors are multipliers of the base costs.

The cost of Additions to clinics is estimated at a unit cost higher than New clinics due to the complexities of tying into the existing structures.

Medical equipment is calculated at 17% of Base Cost for additions of new space only and is included as a line item in the estimate of base costs.

- **General Requirements Factor**

General Requirements Factor is based on Anchorage costs without area adjustment. The factor is 1.20. It is multiplied by the Base Cost to get the project cost, exclusive of planning, architecture, engineering and administrative costs. This factor assumes projects include multiple deficiencies, which are then consolidated into single projects for economies of scale. The general requirements factor has not been adjusted for Indian Preference.

- **Area Cost Factor**

The Area Cost Factor used in the cost estimates for this facility is shown in Section VI of this report. The area cost factors are taken from a recent study completed for the Denali Commission for statewide healthcare facilities. The numbers are the result of a matrix of cost variables including such items as air travel, local hire costs, room and board, freight, fire protection equipment, foundation requirements, and heating equipment as well as contractor costs such as mobilization, demobilization, overhead, profit, bonds and insurance. These parameters were reconsidered for each village, following the site visit, and were modified, if necessary.

- **Contingency for Design Unknowns (Estimating Contingency)**

The Design Unknowns Contingency is an estimator's contingency based on the schematic nature of the information provided, the lack of any real design, and the assumption that any project will encompass related work not specifically mentioned. The factor used is 1.15.

- **Estimated Total Cost**

This is the total estimated bid cost for work completed under Davis Bacon wage contracts, assuming construction before year-end 2001. This is the number that is entered in the front of the deficiency form. No inflation factor has been applied to this data.

- **Project Cost Factors**

Similar to new clinics, the following project factors have been included in Section VI of this report.

Design Services is included at 10% to cover professional services including engineering and design.

Construction Contingency is included at 10% of the Base Costs to cover changes encountered during construction.

Construction Administration has been included at 8% of the Base Costs. This is for monitoring and administration of the construction contract.

- **Estimated Total Project Cost of Remodel/Addition**

This is the total estimated cost of the project including design services, the construction contract cost for work completed under Davis Bacon wages and assuming construction before year-end 2001. No inflation factor has been applied to this data.

V. SUMMARY OF EXISTING CLINIC DEFICIENCIES

The attached table summarizes the deficiencies at the clinic and provides a cost estimate to accomplish the proposed modifications. If all deficiencies were to be addressed in a single construction project there would be cost savings that are not reflected in this tabulation. The total cost of remodel/addition shown in Section VI is intended to show an overall remodel cost that reflects this economy. Refer to Section VI for a comparison of remodel/addition costs to the cost of new construction. The specific deficiency sheets are included in Appendix A.

VI. NEW CLINIC ANALYSIS

The decision on whether to fund new clinic construction or a remodel/addition of the existing clinic is to be determined by comparing the cost of a new facility designed to meet the program requirements of the Alaska Rural Primary Care Facilities minimum area requirements with the projected combined cost of renovating, remodeling and adding onto the existing building to provide an equivalent facility. If the cost of the remodel/addition project is greater than 75% of the cost of constructing an altogether new facility then a new facility is recommended. That ratio is computed as follows:

- **The cost of a new clinic in Stevens Village is projected to be:**

Base Anchorage Cost per s.f.		$183/ s.f.
Medical Equipment Costs @ 17%		$31
Design Services 10%		$18
Construction Contingency 10%		$18
Construction Administration. 8%		$15
Sub-total		$265/ s.f.
Area Cost Factor for Stevens Village	1.65*	
Adjusted Cost per s.f.		$438/ s.f.

Total Project Cost of NEW BUILDING 1,500 x $438 = $657,000

- **The cost of a Remodel/Renovation/Addition is projected to be:**

Projected cost of code/condition renovations (From the deficiency summary)
90% of cost of code/condition improvement** $175,145 Renovation

Projected cost of remodeling work (See A04)
680 s.f. clinic @ 100% remodel = 680 s.f. $99,582 Remodel

Projected cost of building addition (See A02)
1,500 s.f. – 680 s.f. = 820 s.f. $406,760 Addition
Design 10%, Const. Contingency 10%, Const. Admin. 8% $190,816

Total Project Cost of REMODEL ADDITION $872,303

- **Ratio of remodel:new is $872,303 : $657,000 = 1.33X**

The cost of a remodel/addition for this clinic would cost 133% the cost of a new clinic, therefore, a new clinic is recommended for this community.

* The Area Cost Factor was refined by Estimations, Inc. in July 2001 based on information obtained during the site visit.

** The 90% factor represents economy of scale by completing all renovation work in the same project.

Appendix A: SPECIFIC DEFICIENCIES LISTING

Refer to the attached sheets for the listing of the individual deficiencies and the corrective action recommended.

Appendix B: GENERAL SITE PHOTOGRAPHS

The following sheets provide additional photographic documentation of the existing building and surroundings.

Appendix C: ADCED Community Profile

Refer to the attached document prepared by Alaska Department of Community and Economic Development profiling the community of Stevens Village.

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